

MASTER OF SCIENCE IN DEFENSE ANALYSIS

IMPROVING USAF SPECIAL TACTICS READINESS TO MEET THE OPERATIONAL DEMANDS OF THE USAF AND U.S. SPECIAL OPERATIONS COMMAND (SOCOM)

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The sometimes-divergent mission of the USAF and USSOCOM has strained the ability of USAF Special Tactics (ST) to meet the operational demands of each. The thesis will determine if USAF Special Tactics (ST) can better meet the operational requirements of both the USAF and USSOCOM.

This is not a manpower study but a study of the readiness training required to support the ST operational mission. The thesis identifies ST requirements as the capability to perform its core competencies, Terminal Control, Recovery, and Reconnaissance, and their nine associated core tasks. This thesis will quantify the Training Time Required (TTR) and the Training Time Allotted (TTA) to accomplish the minimum essential training required to meet ST operational demands.

Although the TTR to meet this demand exceeds the TTA, there are strategies available to deal with this training shortfall. With an improved readiness system in place ST can be more prepared to meet the operational demands of both the USAF and SOCOM. Choices must be made to implement a readiness system that best prepares for operational requirements, encourages innovative approaches, and maintains the flexibility to train for emerging missions.

KEYWORDS: Special Tactics, Combat Control, Pararescueman, Readiness, Special Tactics Team, Air Force Special Operations

DEFEATING THE MODERN ASYMMETRIC THREAT

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On February 24th, 2002 the Prime Minister of Sri Lanka entered into a Peace Agreement with the Liberation Tigers of Tamil Eelam (LTTE) ending a horrific 19 year-old low-intensity conflict. Over the course of nearly two decades, the LTTE came to exemplify the modern asymmetric threat as they battled the Sri Lankan Armed Forces (SLAF) and for a period an Indian Peace Keeping Force (IPKF). The anthropology in Chapter II, history in Chapter III, and explanation of the Tigers in Chapter IV describes most of the intricacies of the struggle. In particular, Chapter IV offers four explanations for the prolific use of suicide bombers by the LTTE: one strategic, one operational, one psychological and one religious. Chapter V conducts an analysis of the conflict to garner what lessons can be learned from the successes and failures of the SLAF and IPKF so that U.S. commanders can better prepare their troops for future battles against organizations employing similar tactics as the LTTE.

Chapter V further tests the hypothesis that the four principles of Internal Defense and Development (IDAD) as currently defined in U.S. Joint Doctrine (maximum intelligence, minimum violence, unity of effort, and responsive government) are the applicable variables in defeating the modern asymmetric threat, even those that employ suicide bombers. Success was defined in defeating the modern asymmetric threat as beating the threat sufficiently through military means that the enemy lays down his arms, gives up the use of his explosives, and seeks to end the conflict peacefully by political means. With the February signing of

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the peace accord, having been greatly assisted by the global effects of the 9/11 attacks in the U.S., the Sri Lankan government and its armed forces finally achieved success in defeating the LTTE according to this definition. Whether wittingly or unwittingly at the time, the Sri Lankans were adhering to all four principles of IDAD. Some may argue that without the effects of 9/11 this would not have been possible and this may very well be true, but it does not negate my argument. Chapter VI defends this conclusion and makes some further recommendations for improving the definitions of the IDAD principles so that young U.S. military officers and non-commissioned officers may be better prepared when they come face to face with similar threats in the near future.

KEYWORDS: Sri Lanka, Liberation Tigers of Tamil – Eelam (LTTE), Ethnic Conflict, Asymmetry, Suicide Terrorism, Foreign Internal Defense, Internal Defense and Development, Maximum Intelligence, Minimum Violence, Unity of Effort, Responsive Government, Special Operations, Low-Intensity Conflict

UNITED STATES MILITARY-TO-MILITARY CONTACT WITH THE PEOPLE'S LIBERATION ARMY OF CHINA

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This thesis will assess whether or not military-to-military contacts between the United States military and the Chinese People's Liberation Army (PLA) will be advantageous to American interests. The main reason not to increase military-to-military contact is that we may go to war with China in the future. Taiwan, China's perceived bid for regional hegemony, and its aggressive missile programs stand as reasons not to increase military-to-military contact programs. On the other hand, engagement proponents would argue that access to counterparts in foreign militaries might help avert these very crises that may lead to war. In addition, case studies of Indonesia and El Salvador show that the long-held traditions of strong military influence over civil administration and oppression towards their own populace are on the decline. To a significant degree, this can be attributed to the participation of these nation's security forces in American military-to-military engagement programs. Through aggressive military engagement programs, the United States has gained significant access to top military and civilian leaders in foreign nations. On some occasions, this has resulted in influencing these individuals and has led to positive and significant changes in patterns of behavior of the host nation's security forces.

KEYWORDS: People's Liberation Army, PLA, China, Military-to-Military, Military Engagement, Military Exchanges, Military Relations, Peacetime Engagement, International Military Education and Training, IMET, Indonesia, El Salvador, US-Sino Military Relations, Theater Engagement Plan

CENTERALIZING TO ACHIEVE INFORMATION SUPERIORITY

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The purpose of this thesis is to propose a potential organizational structure for effectively utilizing Information Operations (IO) within the Department of Defense (DoD). This thesis is in response to a request for research from the vice commander of the 193 Special Operations Wing. According to this individual, the FY 1999 Joint Warfighting Capabilities Assessment, IO panel cycle, highlighted various deficiencies ranging from inadequate manning and force structure, to ineffective planning and integration

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processes, to inadequate capabilities available to support CINC requirements. Currently no one federal agency or military department has total responsibility or authority to bring all the disparate, but dependent, IO functions/requirements together. As a result, funding, personnel resourcing, and control is fragmented to the detriment of the nation's warfighting capabilities.

As demonstrated by the above finding, the subject of IO has pervaded numerous warfighting commands, doctrinal documents, and future vision plans. Despite this pervasion, there is no single agency within DoD that has the sole responsibility for providing or prosecuting information operations. The thesis will answer the question: What is an effective organizational structure for providing information operations that produces the synergistic effects of centralization without reducing the gains achieved at unit levels by having a decentralized approach? The answer to this question will provide an organizational model that may be applied to any individual service, or DoD as a whole, to provide an organized approach to IO. The authors of this thesis do not contend that this model will be the only way to organize for IO, only one way to organize for IO.

KEYWORDS: Information Operations, Organizational Modeling, C4ISR Command and Control

INFORMATION OPERATIONS: THE NEED FOR A NATIONAL STRATEGY

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This thesis explores the hypothesis that a national information strategy would enhance military effectiveness and national security. Analysis of the role of information in conflict, a definition of what information is, and how it can be used to support military operations establishes the foundation for the thesis. Perception management, system destruction, and information exploitation are identified as key elements of to an effective strategy. They are reflected in the 17 information operational capabilities in joint doctrine. Four categories were created to differentiate the IO capabilities along offense/defense and technological/cognitive lines. The current focus of IO in the U.S. is the technical/offensive IO category, with less attention being given to the conceptual/ cognitive category. This may be due to a lack of strategic IO planning. Therefore, a planning methodology is developed herein and used to analyze the Administration's response to the terrorist attacks on 11 September 2001. A detailed analysis of the IO capabilities used identified two shortcomings: the failure to identify all key audiences, and not considering all the IO capabilities available. The thesis recommends adopting the concepts of a National Information Strategy and the IO strategic planning methodology used in the study.

KEYWORDS: Information Operations, National Security Strategy, al Qaeda, Terrorist Organizations, Perception Management, Information Superiority, Knowledge

AN ALTERNATIVE APPROACH TO U.S. ARMY TRANSFORMATION

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This thesis examines the concept of developing transformation strategies to determine alternative paths that the U.S. Army could follow in preparing for future conflict. It draws insights from chaos theory and organizational theory to develop a theoretical framework useful in guiding military transformation. It also surveys other prominent ideas about organization, technology, and doctrine to assess the alternative approaches to changing existing military forces. The result of this work is to synthesize concepts from multiple disciplines and determine how these insights might affect decisions concerning, structural and

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organizational changes. Further, this thesis addresses the need to balance our reliance on complex technological system with doctrinal and organizational changes. Finally, it calls for a unified theory, which explains the emerging nature of warfare in an information age, and how we intend to fight. The goal is provide military decision makers with insight into an alternative perspective on the future of warfighting and the methods that the military can follow to successfully transform itself for an uncertain future.

KEYWORDS: Chaos Theory, Military Transformation, Revolution in Military Affairs (RMA), Organization, Technology, Doctrine

THE LAW ENFORCEMENT APPROACH TO COMBATTING TERRORISM:

AN ANALYSIS OF U.S. POLICY

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This thesis examines the US policy for combating terrorism from 1988 to 2000 using five case studies; the bombing of Pan Am flight 103, the bombing of the World Trade Center in 1993, the bombing of the U.S. barracks in Saudi Arabia in 1996, the bombings of two U.S. embassies in Africa in 1998 and the bombing of the *USS Cole* in 2000. The thesis begins by outlining the minimum requirements for a counter-terrorism policy. They are; that a policy must either deter terrorists from attacking the U.S. or, failing that, successfully defend against terrorists who cannot be deterred. Next, the thesis examines the history and development of the law enforcement approach to combating terrorism and a few of the events that set the conditions for its ascendance to the forefront of U.S. policy. After establishing the conditions for its dominance, the thesis takes an in-depth to look at the U.S. response in the aftermath of each of the five terrorist attacks. The final chapter compares the demonstrated performance of the policy in the aftermath of the five bombings with the basic requirements for a counter-terrorist policy to determine the effectiveness of the policy as a whole.

KEYWORDS: Terrorism, U.S. Policy, Law Enforcement

MASS VERTICAL ENVELOPMENT (AIRBORNE) OPERATIONS: A CRITICAL CAPABILITY IN THE ARMY AFTER NEXT?

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The purpose of this thesis is to review the viability of mass airborne operations in the context of today's modern war environment, specifically in a Major Regional Contingency (MRC) scenario as outlined in the most current Quadrennial Defense Review. The definition of a mass airborne operation is an operation conducted by a unit of brigade/regiment size or larger. Thirteen mass airborne operations, conducted by several nations and in several regions of the world, were analyzed and it was determined that the success rate of these operations was only marginal. The U.S. Air Force's total lift capability was also analyzed and compared against the MTM/D requirements as determined by the QDR, and that total was decremented by the airlift required to support the 82nd Airborne Division. Overall, USAF is not prepared to conduct both missions simultaneously. The critical and unique nature of the 82nd Airborne, was then evaluated as compared to the other light divisions and the 75th Ranger Regiment, and it was concluded that for the missions assigned, the overall airborne force that the U.S. Army maintains is too large, and could be reduced to fulfill its missions, thereby freeing up much needed resources for the remainder of the force.

KEYWORDS: 82nd Airborne Division, Airborne Operations, Vertical Envelopment

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COST BENEFIT ANALYSIS OF ENTERPRISE RESOURCE PLANNING SYSTEM FOR THE NAVAL POSTGRADUATE SCHOOL

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This thesis reviewed and evaluated the ERP Solution System currently in the Integration Testing Phase at NAVAIR and examined the benefits and cost that NPS could leverage by purchasing the system for approximately \$2.7M for 200 users or \$3.1M for 500 users. This thesis looked at the capabilities of the current NAVAIR SIGMA ERP Solution System, in terms of money and level of expertise. The research also looked at the alternatives and options to enable NPS to close the gaps to fit its current needs.

RADM David Ellison, Superintendent, wanted to explore the possibility of joining NAVAIR's ERP Solution System, currently under the Integration Testing Phase, as he believed it was an opportunity for NPS to leverage on this technology. As seen by senior management, the partnership with NAVAIR could benefit NPS, by acquiring and implementing an ERP at a fraction of the cost normally associated with this type of purchase. An additional benefit would be reducing the time associated with implementing an ERP System, normally between 3 and 5 years, to 11 months. Management also saw the advantage of benefiting from NAVAIR lessons learned, partnering with an activity that was familiar with ERP in a Navy setting, and conducting joint training

It was determined by the research that by purchasing an ERP system, NPS in the long run, would realize savings by reduced labor cost, decreased funds spent on NPS homegrown systems, and access real time reports which would eliminate account balance discrepancies.

KEYWORDS: Enterprise Resource Planning System, Cost Benefit Analysis, Information Technology

COUNTERINSURGENCY IN UZBEKISTAN: AN ADAPTED FOREIGN INTERNAL DEFENSE (FID) STRATEGY

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Chronic poverty, stagnant transitions towards democracy and a free-market economy, ecological ruin, authoritarian leaders, and ethnic conflict are but a few of the conditions preventing the stabilization and development of Central Asia. Regional stability will continue to be elusive as long as each of the countries in Central Asia faces internal development challenges. This thesis examines the U.S. relationship with Uzbekistan, the strongest of the Central Asian states, to determine what assistance the U.S. could provide to assist Uzbekistan in overcoming its internal developmental problems. It is argued that the U.S. must shift from the current policy of focusing on rapid, measurable democratic reform and become a determined partner in the process. Using insurgency theory to understand the situation in Uzbekistan, it is proposed that the U.S. foreign internal defense (FID) framework, presented in *Joint Publication 3-07.1*, provides the tools necessary to secure U.S. interests in Uzbekistan, assist Uzbekistan with its most pressing concern, and establish the basis for the development of a responsible, democratic government.

KEYWORDS: Counterinsurgency, Foreign Internal Defense (FID), Uzbekistan, Islamic Movement of Uzbekistan (IMU), Central Asia, Regional Stability, Foreign Policy

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TACTICS, METHODS, AND TECHNIQUES TO IMPROVE SPECIAL FORCES IN-SERVICE ENLISTED RECRUITING

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This thesis identifies and analyzes recruiting strategies that exist outside of the military service that might be considered to increase the number of high-quality enlisted recruits for the United States Army Special Forces Command (USASFC).

The thesis contains a review of the current Special Forces recruiting processes and describes how Special Operations Recruiting Command (SORC) recruits enlisted soldiers. It also analyzes goal congruency and cohesion between SORC, SWCS(A), and USASFC(A). Using recruiting process case studies obtained from five diverse civilian organizations, the thesis examines common successful tactics, methods, and techniques (TMTs) used to recruit candidates and then evaluates these TMTs to determine their applicability to the current SF recruiting model.

Finally, the thesis offers three main recommendations using successful TMTs: quality control measures are needed throughout a successful organization; goal congruency is needed to reduce friction and achieve effective and efficient bottom-line results; and metrics, incentives, and defined success must be aligned with the bottom-line target. These recommendations could result in fewer candidates required for recruitment by SORC, while producing a greater number of high-quality recruits for the SF training pipeline and, ultimately, for USASFC(A) units.

KEYWORDS: Special Forces, Recruiting, Special Operation Forces, Special Operations Recruiting Company, SORC, Enlisted Personnel Recruiting

CONVENTIONAL AND IRREGULAR FORCE INTEGRATION ON THE MODERN BATTLEFIELD: A COUNTERFACTUAL ANALYSIS OF OPERATION ALLIED FORCE (U)

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(U) The purpose of this thesis is to determine what significant benefits can be gained from integration between conventional and irregular forces through the use of Joint Special Operations Forces (SOF) on the modern battlefield. Using Operation Allied Force, NATO's air war over Serbia, as a case study, an evaluation of how the war was fought at the tactical level against the Yugoslav ground forces in Kosovo from the perspective of the conventional force (Joint Task Force Noble Anvil), the irregular force (the Kosovo Liberation Army), and SOF (Joint Special Operations Task Force Noble Anvil) was completed. From this analysis, answers to three questions were sought: 1) was an integrated campaign tactically possible (was JTF-NA capable of executing such a plan) and what would have been the tactical results of using this strategy? 2) Would tactical success against Yugoslav ground fielded forces lead to NATO's operational and strategic success as well? and, 3) what would have been the long-term consequences of using this strategy? Answering these questions will lead to a greater appreciation of integration as a viable and effective strategy for combating future adversaries.

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KEYWORDS: Air Power, Time Critical Targeting, Fielded Forces Attack, Unconventional Warfare, Joint Integration Operations, Operation Allied Force, Joint Task Force Noble Anvil (JTF-NA), Joint Special Operations Task Force Noble Anvil (JSOTF-NA), Kosovo Liberation Army (KLA)

**MICRO AIR VEHICLES FOR SPECIAL OPERATIONS:
OPTIONS FOR IMMEDIATE EMPLOYMENT**

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This thesis evaluates the feasibility of acquiring a Micro Air Vehicle (MAV) system for immediate use by selected U.S. Special Operations Command (USSOCOM) forces. The intent is to determine if any commercial or government-sponsored MAVs are sufficiently mature to provide a useful, organic surveillance capability for individual special operators. This thesis is *not* intended to supplant the more robust systems programmed under USSOCOM and Service initiatives, but rather to explore options for an interim capability to meet current operational requirements. Criteria for identification of systems providing a "useful capability" were established through direct survey of 50 tactical operators from U.S. Army, Navy, Air Force, and joint special operations commands. Analysis of the five most mature MAV systems in development indicates that none are sufficiently mature to provide an immediately "useful" capability for operational use. Two current systems, however, are worth future consideration. The first, BAE Systems' *Microstar*, could soon provide a limited capability for niche missions requiring ranges of less than 2 kilometers and exceptional stealth. The second system, Allied Aerospace's *I-STAR*, is expected to meet all of the operators' requirements for a "useful" MAV capability by November 2003. Considerations for *Microstar* and *I-STAR* acquisition and additional recommendations regarding SOF MAV development are noted in the conclusion.

KEYWORDS: SOF Micro Air Vehicles, SOF MAV, SOF Unmanned Air Vehicles, Organic Air Vehicle, OAV, MAV, MAVACTD, SLADF, I-STAR, Microstar, Kolibri, Black Widow, Gator

**THE EFFECT OF UNMANNED AERIAL VEHICLE
SYSTEMS ON PRECISION ENGAGEMENT**

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The effect of integrating unmanned aerial vehicles (UAV) systems into today's battlespace is promoting concepts of precision engagement by enhancing our information advantage. This thesis explores the new paradigm evolving around UAV technology that has enabled UAV systems to become a central node for accelerated sensor-to-shooter capabilities involved with precision engagement by accelerating the integration of communications, command, control, computers intelligence, surveillance, reconnaissance (C4ISR) systems with recent innovations in time-critical targeting. The increased information advantage and precision engagement strategies recently demonstrated in Operation Enduring Freedom have catalyzed further UAV system integration and highlighted the synergistic effects. Future technological advancements associated with UAV systems will allow new capabilities to evolve that increase our real-time intelligence capabilities and precision engagement strategies.

KEYWORDS: Unmanned Aerial Vehicles, Global Hawk, Predator, Kosovo, Afghanistan, Precision Engagement

